

WHAT IS CLAIMED IS:

1. A process for controlling a fuel cell comprising a fuel cell, which generates power by supplying anode gas and cathode gas into the fuel cell, a compressor which controls the amount of the gas to be supplied into the fuel cell, and a pressure control valve which controls the gas pressure of the fuel cell and which is provided on the downstream of the fuel cell,

said process comprising:
changing an amount of the supply gas by said compressor during the transition period of said fuel cell, and thereafter changing the opening of said pressure control valve.

2. A process for controlling a fuel cell comprising:
a flow amount feedback control step which controls the flow amount of the gas supplied into a fuel cell to be a prescribed value; and

a pressure feedback control step which controls the pressure of the fuel cell to be a prescribed value,
said feedback steps being stopped during the transition period of the fuel cell.

3. A fuel cell system comprising:
a fuel cell, which generates power by supplying anode gas and cathode gas into the fuel cell,
a compressor which controls the amount of the gas to be supplied into the fuel cell,

a pressure control valve which controls the gas pressure of the fuel cell and which is provided on the downstream of the fuel cell,

airflow control means, which controls the airflow toward the cathode inlet side to be a target airflow amount corresponding to a target power generation amount of the fuel cell by controlling the revolution number of said compressor, and

air pressure control means, which controls the air pressure at the cathode inlet to be a target air pressure corresponding to the target airflow amount by controlling the opening of said pressure control valve at the stationary state, and which controls the pressure control valve corresponding to the change in the airflow amount detected from said flow sensor to thereby control the air pressure to be the target air pressure during the transition period.

4. The fuel cell system as claimed in Claim 3,

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